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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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09/624,718

07/25/2000

Shinichi Yoshimura

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03/24/2004

BELL, BOYD & LLOYD, LLC

P. O. BOX 1135

CHICAGO, IL 60690-1135

EXAMINER

KAO, CHIH CHENG G

ART UNIT

PAPER NUMBER

2882

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/624,718

Applicant(s)

YOSHIMURA, SHINICHI

Examiner

Chih-Cheng Glen Kao

Art Unit

2882

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Drawings

1. The corrected drawings were received on 2/20/04. These drawings are acceptable.

Claim Objections

2. Claims 5 and 6 are objected to because of the following informalities, which appear to be minor draft errors creating lack of antecedent basis or grammatical problems. In the following format (location of objection; suggestion for correction), the following suggestions may obviate the objections: (claim 5, lines 2-3, "the rows or the columns"; inserting - -rows and columns, forming- - before "a matrix" in claim 1, line 2), (claim 6, line 13, "the processing"; deleting "the"), (claim 6, line 14, "than clear signal"; inserting - -the- - before "clear"), and (claim 6, line 14, "or transfer signal"; inserting - -the- - before "transfer").

For purposes of examination, the claims have been treated as such. Appropriate correction is required.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

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3. Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Miyawaki et al. (US Patent 5726439).

4. Regarding claims 1 and 6, Miyawaki et al. discloses an apparatus and method comprising light reception means and a step (col. 2, lines 48-53), operating units and a step for operating a signal by the light reception means being based on at least one of a clear signal and a transfer signal (Fig. 9A, at least #304-306), a plurality of outputting units for a step, each receiving a result of an operation of a corresponding one of the operating units and outputting the result (Fig. 9B, #341-343), and timing adjustment means and a step for adjusting a timing at which the result of the operation is output from the outputting units, said timing adjustment means using a control signal other than the clear or transfer signal (Fig. 9B, #349).

5. Regarding claims 2 and 7, Miyawaki et al. further discloses storage means and a step for storing a plurality of signals at different timings (Fig. 9A, transistors inside #304).

6. Regarding claims 3 and 8, Miyawaki et al. further discloses operating units and a step for executing a comparison operation (Fig. 9A, comparator).

7. Regarding claims 4 and 9, Miyawaki et al. further discloses an arithmetic operation for determining a maximum or minimum value (col. 10, lines 28-30).

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8. Regarding claims 5 and 10, Miyawaki et al. further discloses outputting units outputting results of an arithmetic operation (Fig. 9A, #311) for each of the rows or columns by timing adjustment means (Fig. 9B, #349).

9. Regarding claims 11 and 12, Miyawaki et al. discloses an apparatus and method comprising light reception means and a step (col. 2, lines 48-53), operating units and a step for operating a signal by the light reception means being based on at least one of a clear signal and a transfer signal (Fig. 9A, at least #304-306), wherein operation includes a plurality of modes selected based on a control signal other than the clear and transfer signal (Fig. 9A, #310), and wherein the plurality of modes are represented by different expressions from each other (col. 9, lines 46-52).

10. Regarding claim 13, Miyawaki et al. further discloses operating units performing an arithmetic operation (Fig. 9A, #311).

11. Regarding claims 14 and 15, Miyawaki et al. further discloses operating units storing (Fig. 9A, transistors in #304-306) and operating (Fig. 9A, comparator) a plurality of photoelectrically converted signals (col. 2, lines 48-53) at predetermined timing intervals (Fig. 2 and 5) in the order in which signals are received.

Response to Arguments

12. Applicant's arguments, see the last paragraph on page 7, filed 2/20/04, with respect to the rejection(s) of claim(s) 1 and 6 under 35 U.S.C. 103(a) have been fully considered and are

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persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Miyawaki et al. as recited above, thus withdrawing finality of the last Office action.


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chih-Cheng Glen Kao whose telephone number is (571) 272-2492. The examiner can normally be reached on M - F (9 am to 5 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ed Glick can be reached on (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


gk


EDWARD J. GLICK
SUPERVISORY PATENT EXAMINER